Page 5, please replace the 6th full paragraph with the following paragraph:

a2

Figures 3A-3B illustrate the effect of cross-linked forms of anti-CTLA4 antibody on T cell proliferation and IL-2 production. Proliferation of primary T cells is shown in Figure 3A, and IL-2 production by Jurkat cells is shown in Figure 3B. The T cells were stimulated by anti-CD3 + anti-CD28.

Pages 5-6, please replace the paragraph bridging these pages with the following paragraph:

a3

Figures 4A-4B illustrate the effect of soluble forms of anti-CTLA4 antibody on T cell proliferation and cytokine production. Antibody number 26 enhances the proliferation of primary T cells in a mixed lymphocyte reaction (MLR) (Figure 4A). The effect of various anti-CTLA4 antibodies on IL-2 production by Jurkat cells is shown in Figure 4B.

Page 6, please replace the 4th full paragraph with the following paragraph:

a4

Figures 8A-8B illustrate the ability of toxic moiety-conjugated antibodies that recognize CTLA4 to inhibit the proliferation of CTLA4-bearing Jurkat cells (Figure 8B). These antibodies do not inhibit the proliferation of Jurkat cells which are CTLA4 negative (Figure 8A).

Page 20-21, please replace the paragraph bridging these two pages with the following paragraph:

The comparison of sequences and determination of percent identity between two sequences can be accomplished using a mathematical algorithm. In a preferred embodiment, the percent identity between two amino acid sequences is determined using the GAP program in the GCG software package (available from Accelrys, San Diego, CA), using either a Blosum 62 matrix or a PAM250 matrix, and a gap weight of 16, 14, 12, 10, 8, 6, or 4 and a length weight of 1, 2, 3, 4, 5, or 6. In yet another preferred embodiment, the percent identity between two nucleotide sequences is determined using the GAP program in the GCG software package (available from Accelrys, San Diego, CA), using a NWSgapdna.CMP matrix and a gap weight of 40, 50, 60, 70, or 80 and a length weight of 1, 2, 3, 4, 5, or 6.

Page 21, please replace the first full paragraph with the following paragraph:

The nucleic acid and protein sequences of the CTLA4 can further be used as a "query sequence" to perform a search against public databases to, for example, identify other family members or related sequences. Such searches can be performed using the NBLAST and XBLAST programs (version 2.0) of Altschul, *et al.* (1990) *J. Mol. Biol.* 215:403-10. BLAST nucleotide searches can be performed with the NBLAST program, score = 100, wordlength =12 to obtain nucleotide sequences homologous to CTLA4 nucleic acid molecules of the invention. BLAST protein searches can be performed with the XBLAST program, score = 50, wordlength = 3 to obtain amino acid sequences

-3-

a6

homologous to CTLA4 protein molecules of the invention. To obtain gapped alignment for comparison purposes, Gapped BLAST can be utilized as described in Altschul *et al.*, (1997) *Nucleic Acids Res.* 25(17):3389-3402. When utilizing BLAST and Gapped BLAST programs, the default parameters of the respective programs (*e.g.*, XBLAST and NBLAST) can be used. For example, the nucleotide sequences of the invention were analyzed using the default Blastn matrix 1-3 with gap penalties set at: existence 11 and extension 1. The amino acid sequences of the invention were analyzed using the default settings: the Blosum62 matrix with gap penalties set at existence 11 and extension 1. More information on these programs is available from the NCBI, Bethesda, MD.

Page 57, please replace the 3rd full paragraph with the following paragraph:

a7

Suitable vectors for the invention may be plasmid or viral vectors, including baculoviruses, adenoviruses, poxviruses, adenoassociated viruses (AAV), and retroviral vectors (Price et al, Proc. Natl. Acad. Sci. USA 84:156-160 (1987) such as the MMLV based replication incompetent vector pMV-7 (Kirschmeier et al., DNA 7:219-225 (1988)), as well as human and yeast artificial chromosomes (HACs and YACs). Plasmid expression vectors include plasmids including pBR322, pUC or BLUESCRIPT™ (Stratagene, San Diego, Calif.). Exemplary vectors are described e.g., in U.S. Patents 6,040,147; 6,033,908; 6,037,172; 6,027,722; 5,741,486; 5,656,465.

Page 60, please replace the 1st full paragraph with the following paragraph:

Pharmaceutical compositions suitable for injectable use include sterile aqueous solutions (where water soluble) or dispersions and sterile powders for the extemporaneous preparation of sterile injectable solutions or dispersion. For intravenous administration, suitable carriers include physiological saline, bacteriostatic water, CREMOPHOR EL™ (BASF, Parsippany, NJ) or phosphate buffered saline (PBS). In all cases, the composition must be sterile and should be fluid to the extent that easy syringeability exists. It must be stable under the conditions of manufacture and storage and must be preserved against the contaminating action of microorganisms such as bacteria and fungi. The carrier can be a solvent or dispersion medium containing, for example, water, ethanol, polyol (for example, glycerol, propylene glycol, and liquid polyethylene glycol, and the like), and suitable mixtures thereof. The proper fluidity can be maintained, for example, by the use of a coating such as lecithin, by the maintenance of the required particle size in the case of dispersion and by the use of surfactants. Prevention of the action of microorganisms can be achieved by various antibacterial and antifungal agents, for example, parabens, chlorobutanol, phenol, ascorbic acid, thimerosal, and the like. In many cases, it will be preferable to include isotonic agents, for example, sugars, polyalcohols such as manitol, sorbitol, sodium chloride in the composition. Prolonged absorption of the injectable compositions can be brought about by including in the composition an agent which delays absorption, for example, aluminum monostearate and gelatin.

Pages 76-77, please replace the paragraph bridging these two pages with the following paragraph:

A group of 5 mice (Jackson Labs, Maine) were injected with 2µg cDNA encoding the extracellular domain of rhuCTLA4. Purified plasma cDNA was precipitated onto gold beads to a concentration of 1µg cDNA/0.5mg gold. The gold beads and precipitated cDNA were delivered, monthly in two non-overlapping shots, intradermally in the abdomen of approximately 11 week old female BALB/c mice using a Helios charged gene. These animal were immunized every four weeks and spleens were removed from the animals.

REMARKS

Election of Species

In the last Office Action, the Examiner acknowledged Applicants' election with traverse of Group I (claims 1-15) but stated further that this application contains claims directed to patentably distinct species. The Examiner requires Applicants to elect a particular species of toxic moiety from among those that are either a carbohydrate (e.g., calicheamicin) or a bacterial product (e.g., either ricin A chain or saporin). Applicants elect to initially prosecute the species of a carbohydrate (e.g., calicheamicin), with traverse.

Applicants believe that the Examiner can conduct a search for an antibody that specifically recognizes a molecule expressed only on activated T cells and a toxic moiety. Applicants do not believe it is necessary to specify whether the toxic moiety is a